



HIGH PERFORMANCE MACHINES: PAY OFF!

This is not an ADB material. The views expressed in this document are the views of the author/s and/or their organizations and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy and/or completeness of the material's contents, and accepts no responsibility for any direct or indirect consequence of their use or reliance, whether wholly or partially. Please feel free to contact the authors directly should you have queries.

LINZ

WIEN

Founded in

1953



Head office
in Vienna and
main factory
in Linz

Austrian family business

Founded in
1953


Head office
in Vienna and
main factory
in Linz


1,900 employees
in Austria

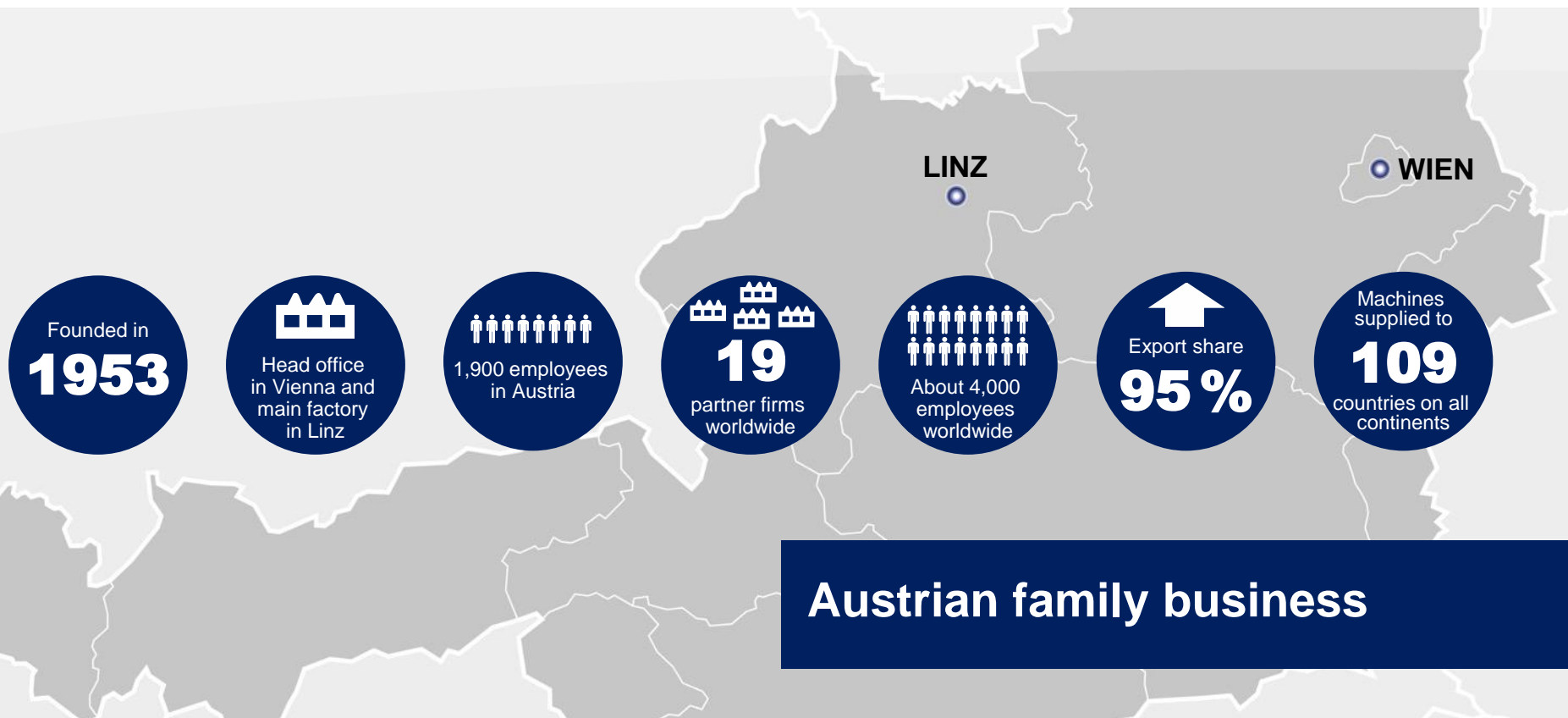

19
partner firms
worldwide


About 4,000
employees
worldwide

LINZ

WIEN

Austrian family business





Close to our customers worldwide

A grayscale world map with white concentric circles centered on Europe, suggesting global reach. The Plasser & Theurer logo is placed at the center of these circles.

Close to our customers worldwide



Close to our customers worldwide

Only full-range supplier for all work sequences

TAMPING

BALLAST
MANAGEMENT

STABILISATION
AND
CONSOLIDATION

BALLAST BED
CLEANING

FORMATION
REHABILITATION

MATERIAL
LOGISTICS

RENEWAL AND LAYING
OF TRACKS AND
TURNOUTS

MOBILE RAIL
TREATMENT

MEASUREMENT

INSTALLATION AND
MAINTENANCE OF
OVERHEAD LINES

SPECIAL TASKS



HIGH PERFORMANCE MACHINES COSTS



HOW TO CHOOSE THE RIGHT SYSTEM?

Large machines only for long traffic blocks?

HOW TO CHOOSE THE RIGHT SYSTEM?

Large machines only for long traffic blocks?

Lowest cost per day or per shift = most cost effective?

HOW TO CHOOSE THE RIGHT SYSTEM?

Large machines only for long traffic blocks?

Lowest cost per day or per shift = most cost effective?

How should I calculate? Cost per meter, cost for work length?

IS THERE ANOTHER WAY?

PARAMETERS

- *Work period: 11 months per year*
- *5 working days per week*
- *Average possession: 120 minutes*
- *Average site length: 2000 meters*
- *Average travel distance to site: 10 km*

CASE STUDY MACHINE COST

3-sleeper Tamping Machine	2-sleeper Tamping Machine	1-sleeper Tamping Machine	1-sleeper Tamping Machine
2200 m/h	1600 m/h	1100 m/h	600 m/h
Continuous action tamping			Cyclic tamping

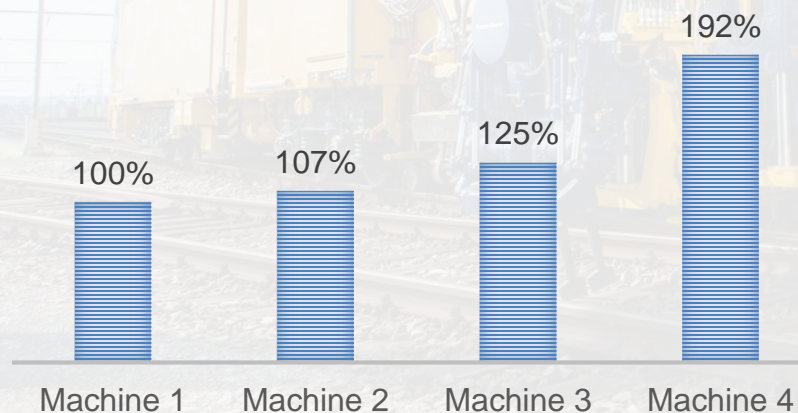
PARAMETERS

- *Work period: 11 months per year*
- *5 working days per week*
- *Average possession: 120 minutes*
- *Average site length: 2000 meters*
- *Average travel distance to site: 10 km*

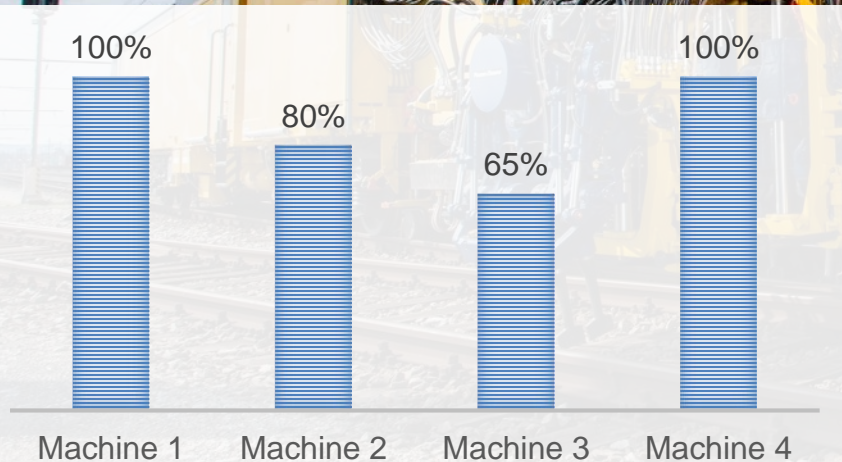
FIRST STEP: CALCULATION OF ANNUAL OUTPUT AND COST

3-sleeper Tamping Machine	2-sleeper Tamping Machine	1-sleeper Tamping Machine	1-sleeper Tamping Machine
Investment			
100%	75%	53%	25%
Output per hour			
100%	72%	50%	27%
Annual output			
633 km	460 km	302 km	164 km

ANNUAL COST FOR ANNUAL WORKLOAD OF 633 KM



ANNUAL COST FOR ANNUAL WORKLOAD OF 300 KM



HOW TO CHOOSE THE RIGHT SYSTEM?

Technical considerations

It is important to compare not only the costs for a single track possession, but to set these costs in **RELATION** to the **ANNUAL OUTPUT**, the **SERVICE LIFE** of the machine and the **COMPLETE WORK SITE** costs.

Plasser & Theurer

HIGH CAPACITY | PRECISION | RELIABILITY

www.plassertheurer.com

Florian POLTERAUER, MBA

Plasser & Theurer

Export von Bahnbaumaschinen Gesellschaft m.b.H.

A-1010 Wien, Johannesgasse 3

Tel.: +43 (0) 1 515 72-0

Fax: +43 (0) 1 513 18 01

E-Mail: florian.polterauer@plassertheurer.com

Illustrations and descriptions may contain optional equipment.

We reserve the right to make alterations in line with further technical developments.